

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: markspencer

Timestamp: Fri Aug 10 07:27:50 EDT 2007

=====

Application No: 10552327

Version No: 1.0

Input Set:

Output Set:

Started: 2007-08-08 17:27:39.764

Finished: 2007-08-08 17:27:41.040

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 276 ms

Total Warnings: 24

Total Errors: 0

No. of SeqIDs Defined: 33

Actual SeqID Count: 33

| Error code | Error Description |
|------------|---|
| W 213 | Artificial or Unknown found in <213> in SEQ ID (1) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (2) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (3) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (4) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (5) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (6) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (7) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (8) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (9) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (10) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (11) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (12) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (15) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (16) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (17) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (18) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (19) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (20) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (21) |
| W 213 | Artificial or Unknown found in <213> in SEQ ID (22) |

Input Set:

Output Set:

Started: 2007-08-08 17:27:39.764
Finished: 2007-08-08 17:27:41.040
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 276 ms
Total Warnings: 24
Total Errors: 0
No. of SeqIDs Defined: 33
Actual SeqID Count: 33

Error code

Error Description

This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> REN, EE CHEE
HIBBERD, MARTIN L.
NG, LISA FONG POH

<120> REAGENTS AND METHODS FOR DETECTING SEVERE ACUTE
RESPIRATORY SYNDROME CORONAVIRUS

<130> 22516-US5

<140> 10552327

<141> 2007-08-08

<150> 10/552,327

<151> 2005-10-07

<150> PCT/SG04/000103

<151> 2004-04-21

<150> 60/464,115

<151> 2003-04-21

<150> 60/464,345

<151> 2003-04-22

<150> 60/464,643

<151> 2003-04-23

<150> 60/464,965

<151> 2003-04-24

<150> 60/496,016

<151> 2003-08-19

<160> 33

<170> PatentIn Ver. 3.3

<210> 1

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 1

tgatggttgt gttccactca acatc

25

<210> 2

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 2
acactggtac aggacaggca attac 25

<210> 3
<211> 25
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 3
ggtgtaagtg cagcccgctct tacac 25

<210> 4
<211> 25
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 4
cgaattttgc tcacagcata caatg 25

<210> 5
<211> 25
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 5
attggagagt acacctttga aaaag 25

<210> 6
<211> 25
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 6

gctagacttc gtgcaaaaca ctacg 25

<210> 7

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 7

tgtggctagt tgtgatgcta tcatg 25

<210> 8

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 8

gctacacatc acgataaatt cactg 25

<210> 9

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 9

cactcaaatc tgctacgtgt attac 25

<210> 10

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 10

ctcgctatgg atgaattcat acagc 25

<210> 11

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 11

ggttgggatt atccaaaatg tga

23

<210> 12

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
oligonucleotide

<400> 12

ggcatcatca gaaagaatca tcat

24

<210> 13

<211> 29727

<212> DNA

<213> SARS coronavirus (Urbani strain)

<400> 13

ttattaggtt tttacctacc caggaaaagc caaccaacct cgatctcttg tagatctgtt 60
ctctaaacga actttaaaat ctgtgtagct gtcgctcggc tgcattgcta gtgcacctac 120
gcagtataaa caataataaa ttttactgtc gttgacaaga aacgagtaac tcgtccctct 180
tctgcagact gcttacggtt tcgtccgtgt tgcagtcgat catcagcata cctagggttc 240
gtccgggtgt gaccgaaagg taagatggag agccttggtc ttggtgtcaa cgagaaaaca 300
cacgtccaac tcagtttgcc tgtccttcag gttagagacg tgctagtgcg tggcttcggg 360
gactctgttg aagaggccct atcggaggca cgtgaacacc tcaaaaatgg cacttgtggt 420
ctagtagagc tggaaaaagg cgtactgccc cagcttgaac agccctatgt gttcattaaa 480
cgttctgatg ccttaagcac caatcacggc cacaaggctg ttgagctggt tgcagaaatg 540
gacggcattc agtacggctg tagcgggtata aactgggag tactcgtgcc acatgtgggc 600
gaaaccccaa ttgcataccg caatgttctt cttcgtgaaga acggttaataa gggagccggg 660
ggtcatagct atggcatcga tctaaagtct tatgacttag gtgacgagct tggcactgat 720
cccattgaag attatgaaca aaactggaac actaagcatg gcagtgggtg actccgtgaa 780
ctcactcgtg agctcaatgg aggtgcagtc actcgtatg tcgacaacaa tttctgtggc 840
ccagatgggt accctcttga ttgcatcaaa gattttctcg cacgcgcggg caagtcaatg 900
tgcactctt cgaacaact tgattacatc gagtccaaga gaggtgtcta ctgctgccgt 960
gaccatgagc atgaaattgc ctggttcact gagcgtctcg ataagagcta cgagcaccag 1020
acacccttcg aaattaagag tgccaagaaa tttgacctt tcaaagggga atgcccaaag 1080
tttgtgttct ctcttaactc aaaagtcaaa gtcattcaac cacgtgttga aaagaaaaag 1140
actgagggtt tcatggggcg tatacgtctt gtgtacctg ttgcatctcc acaggagtgt 1200
aacaatatgc acttgtctac cttgatgaaa tgtaatcatt gcgatgaagt ttcattggcag 1260
acgtgcgact ttctgaaagc cacttgtgaa catttgtggc ctgaaaattt agttattgaa 1320
ggacctacta catgtgggta cctacctact aatgctgtag tgaaaatgcc atgtcctgcc 1380
tgtcaagacc cagagattgg acctgagcat agtggtgcag attatcacia ccactcaaac 1440
attgaaactc gactccgcaa gggaggtagg actagatggt ttggaggctg tgtgtttgcc 1500
tatgttggct gctataataa gcgtgcctac tgggttcctc gtgctagtgc tgatattggc 1560
tcaggccata ctggcattac tgggtgacaat gtggagacct tgaatgagga tctccttgag 1620

| | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|------|
| atactgagtc | gtgaacgtgt | taacattaac | attgttggcg | attttcattt | gaatgaagag | 1680 |
| gttgccatca | ttttggcatc | tttctctgct | tctacaagtg | cctttattga | cactataaag | 1740 |
| agtcttgatt | acaagtcttt | caaaaccatt | gttgagtcct | gcggtaaacta | taaagttaacc | 1800 |
| aagggaaagc | ccgtaaaagg | tgcttggaac | attggacaac | agagatcagt | tttaacacca | 1860 |
| ctgtgtggtt | ttccctcaca | ggctgctggg | gttatcagat | caatttttgc | gcgcacactt | 1920 |
| gatgcagcaa | accactcaat | tcttgatttg | caaagagcag | ctgtcaccat | acttgatggt | 1980 |
| atttctgaac | agtcattacg | tcttgctcgac | gccatggttt | atacttcaga | cctgctcacc | 2040 |
| aacagtgtca | ttattatggc | atatgtaact | ggtggctctg | tacaacagac | ttctcagtgg | 2100 |
| ttgtctaata | ttttgggcac | tactgttgaa | aaactcaggc | ctatctttga | atggattgag | 2160 |
| gcgaaactta | gtgcaggagt | tgaattttctc | aaggatgctt | gggagattct | caaattttctc | 2220 |
| attacagggtg | tttttgacat | cgtcaagggt | caaatcacagg | ttgcttcaga | taacatcaag | 2280 |
| gattgtgtaa | aatgcttcat | tgatgttggt | aacaaggcac | tcgaaatgtg | cattgatcaa | 2340 |
| gtcactatcg | ctggcgcaaa | gttgcgatca | ctcaacttag | gtgaagtcct | catcgctcaa | 2400 |
| agcaagggac | tttaccgtca | gtgtatacgt | ggcaaggagc | agctgcaact | actcatgcct | 2460 |
| cttaaggcac | caaaagaagt | aacctttctt | gaaggtgatt | cacatgacac | agtacttacc | 2520 |
| tctgaggagg | ttgttctcaa | gaacggtgaa | ctcgaagcac | tcgagacgcc | cgttgatagc | 2580 |
| ttcacaaatg | gagctatcgt | tggcacacca | gtctgtgtaa | atggcctcat | gctcttagag | 2640 |
| attaaggaca | aagaacaata | ctgcgcattg | tctcctgggt | tactggctac | aaacaatgtc | 2700 |
| tttcgcttaa | aagggggtgc | accaattaaa | ggtgtaacct | ttggagaaga | tactgtttgg | 2760 |
| gaagttcaag | gttacaagaa | tgtgagaatc | acatttgagc | ttgatgaacg | tgttgacaaa | 2820 |
| gtgcttaatg | aaaagtgtct | tgtctacact | gttgaatccg | gtaccgaagt | tactgagttt | 2880 |
| gcatgtgttg | tagcagaggc | tgttgtgaag | actttacaac | cagtttctga | tctccttacc | 2940 |
| aacatgggta | ttgatcttga | tgagtggagt | gtagctacat | tctacttatt | tgatgatgct | 3000 |
| ggtgaagaaa | acttttcatc | acgtatgtat | tgttcctttt | acctccaga | tgaggaagaa | 3060 |
| gaggacgatg | cagagtgtga | ggaagaagaa | attgatgaaa | cctgtgaaca | tgagtacggt | 3120 |
| acagaggatg | attatcaagg | tctccctctg | gaatttgggtg | cctcagctga | aacagttcga | 3180 |
| gttgaggaag | aagaagagga | agactggctg | gatgatacta | ctgagcaatc | agagattgag | 3240 |
| ccagaaccag | aacctacacc | tgaagaacca | gttaatcagt | ttactggtta | tttaaaactt | 3300 |
| actgacaatg | ttgccattaa | atgtgttgac | atcgttaagg | aggcacaaaag | tgctaatacct | 3360 |
| atgggtgattg | taaatgctgc | taacatacac | ctgaaacatg | gtgggtggtg | agcaggtgca | 3420 |
| ctcaacaagg | caaccaatgg | tgccatgcaa | aaggagagtg | atgattacat | taagctaaat | 3480 |
| ggcctcttta | cagtaggagg | gtcttgtttg | ctttctggac | ataatcttgc | taagaagtgt | 3540 |
| ctgcatgttg | ttggacctaa | cctaaatgca | ggtgaggaca | tccagcttct | taaggcagca | 3600 |
| tatgaaaatt | tcaattcaca | ggacatctta | cttgcaacct | tgttgtcagc | aggcatattt | 3660 |
| ggtgctaaac | cacttcagtc | tttacaagtg | tgcgtgcaga | cggttcgtac | acaggtttat | 3720 |
| attgcagtca | atgacaaagc | tctttatgag | caggttgtca | tggattatct | tgataaacctg | 3780 |
| aagcctagag | tggaagcacc | taacaagag | gagccacca | acacagaaga | ttccaaaact | 3840 |
| gaggagaaat | ctgtcgtaca | gaagcctgtc | gatgtgaagc | caaaaattaa | ggcctgcatt | 3900 |
| gatgaggtta | ccacaacact | ggaagaaact | aagtttctta | ccaataagtt | actcttgttt | 3960 |
| gctgatatca | atggtaaagt | ttaccatgat | tctcagaaca | tgcttagagg | tgaagatatg | 4020 |
| tctttccttg | agaaggatgc | accttacatg | gtaggtgatg | ttatcactag | tggtgatatc | 4080 |
| acttgtgttg | taataccctc | caaaaaggct | ggtggcacta | ctgagatgct | ctcaagagct | 4140 |
| ttgaagaaaag | tgccagttga | tgagtatata | accacgtacc | ctggacaagg | atgtgctggt | 4200 |
| tatacacttg | aggaagctaa | gactgctctt | aagaaatgca | aatctgcatt | ttatgtacta | 4260 |
| ccttcagaag | cacctaatgc | taaggaagag | attctaggaa | ctgtatcctg | gaatttgaga | 4320 |
| gaaatgcttg | ctcatgctga | agagacaaga | aaattaatgc | ctatatgcat | ggatgttaga | 4380 |
| gccataatgg | caaccatcca | acgtaagtat | aaaggaatta | aaattcaaga | gggcatcggt | 4440 |
| gactatgggtg | tccgattctt | cttttatact | agtaaagagc | ctgtagcttc | tattattacg | 4500 |
| aagctgaact | ctctaaatga | gccgcttgtc | acaatgccaa | ttggttatgt | gacacatggt | 4560 |
| tttaatcttg | aagaggctgc | gcgctgtatg | cgttctctta | aagctcctgc | cgtagtgtca | 4620 |
| gtatcatcac | cagatgctgt | tactacatat | aatggatacc | tcacttcgtc | atcaaagaca | 4680 |
| tctgaggagc | actttgtaga | aacagtttct | ttggctggct | cttacagaga | ttggtcctat | 4740 |
| tcaggacagc | gtacagagtt | aggtgttgaa | tttcttaagc | gtggtgacaa | aatttgtgtac | 4800 |
| cacactctgg | agagccccgt | cgagtttcat | cttgacggtg | aggttctttc | acttgacaaa | 4860 |
| ctaaagagtc | tcttatccct | gcgggaggtt | aagactataa | aagtgttcac | aactgtggac | 4920 |
| aacactaatc | tccacacaca | gcttgtggat | atgtctatga | catatggaca | gcagtttggt | 4980 |
| ccaacatact | tggatgggtgc | tgatgttaca | aaaattaaac | ctcatgtaaa | tcatgagggt | 5040 |

| | | | | | | |
|-------------|------------|-------------|-------------|-------------|------------|------|
| aagacttttct | ttgtactacc | tagtgatgac | acactacgta | gtgaagcttt | cgagtactac | 5100 |
| catactcttg | atgagagttt | tcttggtagg | tacatgtctg | ctttaacca | cacaaagaaa | 5160 |
| tggaaatttc | ctcaagttgg | tggtttaact | tcaattaaat | gggctgataa | caattgttat | 5220 |
| ttgtctagt | ttttattagc | acttcaacag | cttgaagtca | aattcaatgc | accagcactt | 5280 |
| caagaggctt | attatagagc | cctgtctggg | gatgctgcta | acttttgtgc | actcactctc | 5340 |
| gcttacagta | ataaaactgt | tggcgagctt | ggtgatgtca | gagaaactat | gacccatctt | 5400 |
| ctacagcatg | ctaatttggg | atctgcaaa | cgagttctta | atgtggtgtg | taaacattgt | 5460 |
| ggtcagaaaa | ctactacctt | aacgggtgta | gaagctgtga | tgtatatggg | tactctatct | 5520 |
| tatgataatc | ttaagacagg | tgtttccatt | ccatgtgtgt | gtggctcgtga | tgctacacaa | 5580 |
| tatctagtac | aacaagagtc | ttcttttgtt | atgatgtctg | caccacctgc | tgagtataaa | 5640 |
| ttacagcaag | gtacattctt | atgtgcgaat | gagtacactg | gtaactatca | gtgtggtcat | 5700 |
| tacactcata | taactgctaa | ggagaccctc | tatcgtattg | acggagctca | ccttacaaag | 5760 |
| atgtcagagt | acaaaggacc | agtgactgat | gttttctaca | aggaaacatc | ttacactaca | 5820 |
| accatcaagc | ctgtgtcgta | taaactcgat | ggagttactt | acacagagat | tgaacaaaaa | 5880 |
| ttggatgggt | attataaaaa | ggataatgct | tactatacag | agcagcctat | agaccttgta | 5940 |
| ccaactcaac | cattacaaaa | tgcgagtttt | gataatttca | aactcacatg | ttctaacaca | 6000 |
| aaatttgctg | atgattttaa | tcaaatagaca | ggcttcacaa | agccagcttc | acgagagcta | 6060 |
| tctgtcacat | tcttcccaga | cttgaatggc | gatgtagtgg | ctattgacta | tagacactat | 6120 |
| tcagcgagtt | tcaagaaagg | tgctaaatta | ctgcataagc | caattgtttg | gcacattaac | 6180 |
| caggctacaa | ccaagacaac | gttcaaacca | aacacttggg | gtttacgttg | tctttggagt | 6240 |
| acaaagccag | tagatacttc | aaattcattt | gaagtctctg | cagtagaaga | cacacaagga | 6300 |
| atggacaatc | ttgcttgtga | aagtcaacaa | cccacctctg | aagaagtagt | ggaaaatcct | 6360 |
| accatacaga | aggaagtcac | agagtgtgac | gtgaaaacta | ccgaagtgtg | aggcaatgtc | 6420 |
| atacttaaac | catcagatga | aggtgtttaa | gtaacacaag | agttaggtca | tgaggatctt | 6480 |
| atggctgctt | atgtggaaaa | cacaagcatt | accattaaga | aacctaatga | gctttcacta | 6540 |
| gccttaggtt | taaaaacaat | tgccactcat | ggtattgctg | caattaatag | tgttccttgg | 6600 |
| agtaaaattt | tggcttatgt | caaaccattc | ttaggacaag | cagcaattac | aacatcaa | 6660 |
| tgcgctaaga | gattagcaca | acgtgtgttt | aacaattata | tgccttatgt | gtttacatta | 6720 |
| ttgttccaat | tgtgtacttt | tactaaaagt | accaattcta | gaattagagc | ttcactacct | 6780 |
| acaactattg | ctaaaaatag | tgttaagagt | gttgctaaat | tatgtttgga | tgccggcatt | 6840 |
| aattatgtga | agtcacccaa | attttctaaa | ttgttcacaa | tcgctatgtg | gctattgttg | 6900 |
| ttaagtattt | gcttaggttc | tctaactctgt | gtaactgctg | cttttgggtg | actcttatct | 6960 |
| aattttgggtg | ctccttctta | ttgtaatggc | gttagagaat | tgtatcttaa | ttcgtctaac | 7020 |
| gttactacta | tggatttctg | tgaaggttct | tttccttgca | gcatttgttt | aagtggatta | 7080 |
| gactcccttg | attcttatcc | agctcttgaa | accattcagg | tgacgatttc | atcgtacaag | 7140 |
| ctagacttga | caattttagg | tctggccgct | gagtgggttt | tggcatatat | gttgttcaca | 7200 |
| aaattctttt | atttattagg | tctttcagct | ataatgcagg | tgttcttttg | ctattttgct | 7260 |
| agtcatttca | tcagcaattc | ttggctcatg | tggtttatca | ttagtattgt | acaaatggca | 7320 |
| cccgtttctg | caatggttag | gatgtacatc | ttctttgctt | ctttctacta | catatggaa | 7380 |
| agctatgttc | atatcatgga | tggttgcacc | tcttcgactt | gcatgatgtg | ctataagcgc | 7440 |
| aatcgtgcca | cacgcgttga | gtgtacaact | attgttaatg | gcatgaagag | atctttctat | 7500 |
| gtctatgcaa | atggaggccg | tggcttctgc | aagactcaca | attggaattg | tctcaattgt | 7560 |
| gacacatttt | gcactggtag | tacatttcatt | agtgatgaag | ttgctcgtga | tttgtcactc | 7620 |
| cagtttaaaa | gaccaatcaa | ccctactgac | cagtcacgtg | atattgttga | tagtgttgct | 7680 |
| gtgaaaaatg | gcgcgcttca | cctctacttt | gacaaggctg | gtcaaaagac | ctatgagaga | 7740 |
| catccgctct | cccattttgt | caatttagac | aatttgagag | ctaacaacac | taaaggttca | 7800 |
| ctgcctatta | atgtcatagt | ttttgatggc | aagtcacaa | gacgacgagc | tgcttctaag | 7860 |
| tctgcttctg | tgtactacag | tcagctgatg | tgccaacctc | ttctgttgct | tgaccaagtt | 7920 |
| cttgatcag | acgttggaga | tagtactgaa | gtttccgtta | agatgtttga | tgcttatgtc | 7980 |
| gacacctttt | cagcaacttt | tagtgttcct | atggaaaaac | ttaaggcact | tgttgctaca | 8040 |
| gctcacagcg | agttagcaaa | gggtgtagct | ttagatggtg | tcctttctac | attcgtgtca | 8100 |
| gctgcccgac | aagggtgttg | tgataccgat | gttgacacaa | aggatgttat | tgaatgtctc | 8160 |
| aaactttcac | atcactctga | cttagaagtg | acagggtgaca | gttgtaacaa | tttcatgctc | 8220 |
| acctataata | aggttgaaaa | catgacgccc | agagatcttg | gcgcatgtat | tgactgtaat | 8280 |
| gcaaggcata | tcaatgccca | agtagcaaaa | agtcacaatg | tttactcat | ctggaatgta | 8340 |
| aaagactaca | tgtctttatc | tgaacagctg | cgtaaacaaa | ttcgtagtgc | tgccaagaag | 8400 |
| aacaacatac | cttttagact | aacttgtgct | acaactagac | aggttgtcaa | tgtcataact | 8460 |

| | | | | | | |
|-------------|-------------|-------------|------------|------------|-------------|-------|
| actaaaatct | cactcaaggg | tggttaagatt | gttagtactt | gttttaaact | tatgcttaag | 8520 |
| gccacattat | tgtgcgttct | tgctgcattg | gtttgttata | tcgttatgcc | agtacatata | 8580 |
| ttgtcaatcc | atgatggtta | cacaaatgaa | atcattgggt | acaaagccat | tcaggatggg | 8640 |
| gtcactcgtg | acatcatttc | tactgatgat | tgttttgcaa | ataaacatgc | tggttttgac | 8700 |
| gcatgggtta | gccagcgtgg | tggttcatac | aaaaatgaca | aaagctgccc | tgtagtagct | 8760 |
| gctatcatta | caagagagat | tggtttcata | gtgcctggct | taccgggtac | tgtgctgaga | 8820 |
| gcaatcaatg | gtgacttctt | gcattttcta | cctcgtgttt | ttagtgctgt | tggaacatt | 8880 |
| tgctacacac | cttccaaact | cattgagtat | agtgattttg | ctacctctgc | ttgcgttctt | 8940 |
| gctgctgagt | gtacaatttt | taaggatgct | atgggcaaac | ctgtgccata | ttgttatgac | 9000 |
| actaatttgc | tagaggggtc | tattttcttat | agtgagcttc | gtccagacac | tcgttatgtg | 9060 |
| cttatggatg | gttccatcat | acagtttcct | aaactttacc | tggagggttc | tgtagagta | 9120 |
| gtaacaactt | ttgatgctga | gtactgtaga | catggtacat | gcgaaaggtc | agaagtaggt | 9180 |
| atttgcctat | ctaccagtgg | tagatgggtt | cttaataatg | agcattacag | agctctatca | 9240 |
| ggagttttct | gtggtgttga | tgcgatgaat | ctcatagcta | acatctttac | tcctcttggt | 9300 |
| caacctgtgg | gtgctttaga | tgtgtctgct | tcagtagtgg | ctggtggtat | tattgccata | 9360 |
| ttggtgactt | gtgctgccta | ctactttatg | aaattcagac | gtgttttttg | tgagtacaac | 9420 |
| catgttggtg | ctgctaattgc | acttttggtt | ttgatgtctt | tcactatact | ctgtctggta | 9480 |
| ccagcttaca | gctttctgcc | gggagtctac | tcagtctttt | acttgactt | gacattctat | 9540 |
| ttcaccaatg | atgtttcatt | cttggtcac | cttcaatggg | ttgccatgtt | ttctcctatt | 9600 |
| gtgccttttt | ggataacagc | aatctatgta | ttctgtattt | ctctgaagca | ctgccattgg | 9660 |
| ttctttaaca | actatcttag | gaaaagagtc | atgtttaatg | gagttacatt | tagtaccttc | 9720 |
| gaggaggctg | ctttgtgtac | ctttttgctc | aacaaggaaa | tgtacctaaa | attgcgtagc | 9780 |
| gagacactgt | tgccacttac | acagtataac | aggtatcttg | ctctatataa | caagtacaag | 9840 |
| tatttcagtg | gagccttaga | tactaccagc | tatcgtgaag | cagcttgctg | ccacttagca | 9900 |
| aaggctctaa | atgacttttag | caactcaggt | gctgatgttc | tctaccaacc | accacagaca | 9960 |
| tcaatcactt | ctgctgttct | gcagagtggg | tttaggaaaa | tggcattccc | gtcaggcaaa | 10020 |
| gttgaagggg | gcatggtaca | agtaacctgt | ggaactacaa | ctcttaatgg | attgtgggtg | 10080 |
| gatgacacag | tatactgtcc | aagacatgtc | atttgcacag | cagaagacat | gcttaatcct | 10140 |
| aactatgaag | atctgctcat | tcgcaaactc | aaccatagct | ttcttggtca | ggctggcaat | 10200 |
| gttcaacttc | gtgttatttg | ccattctatg | caaaattgtc | tgcttaggct | taaagttagt | 10260 |
| acttctaacc | ctaagacacc | caagtataaa | tttgtcogta | tccaacctgg | tcaaacattt | 10320 |
| tcagttctag | catgctacaa | tggttcacca | tctgggtgtt | atcagtgtgc | catgagacct | 10380 |
| aatcatacca | ttaaagggtc | tttccttaat | ggatcatgtg | gtagtggttg | ttttaacatt | 10440 |
| gattatgatt | gcgtgtcttt | ctgctatatg | catcatatgg | agcttccaac | aggagtacac | 10500 |
| gctggtagctg | acttagaagg | taaattctat | ggtccatttg | ttgacagaca | aactgcacag | 10560 |
| gctgcaggta | cagacacaac | cataacatta | aatgttttgg | catggctgta | tgctgctgtt | 10620 |
| atcaatggtg | ataggtgggt | tcttaataga | ttcaccacta | ctttgaatga | ctttaacctt | 10680 |
| gtggcaatga | agtacaacta | tgaacctttg | acacaagatc | atgttgacat | attgggacct | 10740 |
| ctttctgctc | aaacaggaat | tgcctcttta | gatatgtgtg | ctgctttgaa | agagctgctg | 10800 |
| cagaatggta | tgaatggctg | tactatcctt | ggtagcacta | ttttagaaga | tgagtttaca | 10860 |
| ccatttgatg | ttgttagaca | atgctctggg | gttaccttcc | aaggtaagtt | caagaaaatt | 10920 |
| gttaagggca | ctcatcattg | gatgctttta | actttcttga | catcactatt | gattcttggt | 10980 |
| caaagtacac | agtggtcact | gtttttcttt | gtttacgaga | atgctttctt | gccatttact | 11040 |
| cttgggtatta | tggcaattgc | tgcattgtgt | atgctgcttg | ttaagcataa | gcacgcattc | 11100 |
| ttgtgcttgt | ttctgttacc | ttctcttgca | acagttgctt | actttaatat | gggtctacatg | 11160 |
| cctgctagct | gggtgatgct | tatcatgaca | tggcttgaat | tggctgacac | tagcttgtct | 11220 |
| ggttataggc | ttaaggattg | tgttatgtat | gcttcagctt | tagttttgct | tattctcatg | 11280 |
| acagctcgca | ctgtttatga | tgatgctgct | agacgtgttt | ggacactgat | gaatgtcatt | 11340 |
| acacttggtt | acaaagtcta | ctatggtaat | gctttagatc | aagctatttc | catgtgggcc | 11400 |
| ttagttattt | ctgtaacctc | taactattct | gggtgcgtta | cgactatcat | gttttttagct | 11460 |
| agagctatag | tgtttgtgtg | tgttgagtat | taccattgtt | tatttattac | tggaacacc | 11520 |
| ttacagtgtg | tcatgcttgt | ttattgtttc | ttaggtattt | gttgctgctg | ctactttggc | 11580 |
| cttttctgtt | tactcaaccg | ttacttcagg | cttactcttg | gtgtttatga | ctacttggtc | 11640 |
| tctacacaag | aatttaggta | tatgaactcc | caggggcttt | tgctctctaa | gagtagtatt | 11700 |
| gatgctttca | agcttaacat | taagttgttg | ggtattggag | gtaaaccatg | tatcaagggtt | 11760 |
| gctactgtac | agtctaaaat | gtctga | | | | |